Remarks:

Applicant would like to express appreciation for the courtesies extended by the Examiner in the telephonic interview conducted on July 21, 2010 between the Examiner and the undersigned. During the interview, the Examiner indicated that the amendments to claim 25 submitted herewith would be entered and considered without the filing of a Request for Continued Examination.

Claims 17-31 are pending. Claims 17-24 have been allowed. Applicant would like to express appreciation for the Examiner's indication of allowance of these claims.

Claims 25-31 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Specifically, the Examiner indicates that claim 25 is ambiguous regarding whether the recited contact that is interrupted is restored again. The Examiner suggests replacing the phrase "can be interrupted and restored again" on line 6 with the phrase "is interrupted and restored again." Applicant has amended claim 25 to incorporate the Examiner's suggestion.

Claims 25 and 28-31 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,204,669 ("Dorfe") in view of U.S. Publication No. 2004/0090925 ("Schoeberl"). Additionally, claim 26 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Dorfe in view of Schoeberl and further in view of U.S. Publication No. 2004/0012249 ("Koelzir"). Finally, claim 27 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Dorfe in view of Schoeberl and further in view of U.S. Patent No. 7,062,718 ("Kodosky"). Of these claims, only claim 25 is independent. Accordingly, as Applicant believes claim 25 as amended is in condition for allowance, Applicant will only address the rejection of claim 25.

After acknowledging that Dorfe does not teach calculation of topology information as required by claim 25, the Examiner asserts that Schoeberl discloses "an architecture where after a network reset, which includes the addition or removal of nodes (interruption of a contact) [0050], a current topology (module identification information registered while the contact was interrupted) is compared to a reference topology (module identification information registered before the interruption of a contact) [0050]." Applicant agrees that Schoeberl detects topology changes after a system reset. Initially, Schoeberl stores a reference topology. When a module is removed or added, the Schoeberl system executes a reset procedure. After the reset, the system

determines what was changed by communicating with the modules again, and comparing the post-reset module information to the reference topology.

It appears from the Examiner's comments that he is equating the topology calculated by the claimed computing unit (what the Examiner refers to as "a current topology") with the state of the nodes of Schoeberl during a reset procedure. The Examiner states in the Response to Arguments section of the Office Action, that "Schoeberl discloses the network comparison is carried out as soon as a network terminal is removed (contact interrupted; see paragraph 0055). In other words, the network reset occurs while a node is removed from the network (see paragraphs 0055-0056)." Thus, according to the Examiner, the Schoeberl system obtains module information after removal of a node (a contact interruption) and during the resulting reset procedure to determine a current topology.

As a preliminary matter, Applicant respectfully asserts that removal of a node is not an "interruption" of contact with that node. When a node is removed in Schoeberl, the contact with that node is disconnected, not interrupted. This distinction is related to a basic difference between the claimed system and that of Schoeberl. The claimed system computes a topology during normal operation by interrupting communications with modules and determining the effect of those interruptions. The Schoeberl system, on the other hand, computes a topology after a module is removed, thereby triggering a reset. To expedite prosecution of this case, Applicant has again amended claim 25 to emphasize the temporary nature of the contact interruption, which is in sharp contrast to the permanent contact disconnection taught in Schoeberl.

More specifically, claim 25 has been amended to recite (1) "the contact of a module and the central unit is interrupted and restored again," and (2) the computer unit includes "a computing unit to calculate a topology of the analytical system as defined by the several modules after the contact has been interrupted and restored again." Clearly, as amended, claim 25 requires the interruption of the contact between the central unit and the module to be temporary (as the word "interruption" already implied) because the contact is claimed as being restored. It is equally clear that the topology calculated by the claimed computing unit is the topology of the modules after this temporary interruption is complete (i.e., after the interrupted contact is restored again). The teaching of Schoeberl is to determine the system topology with the module

removed. Even assuming that the removal of a module from the Schoeberl system is an "interruption" of contact with the module, an assumption Applicant does not hold, there is certainly no disclosure or suggestion in Schoeberl of the contact being restored again as part of the topology calculation process. Accordingly, Applicant respectfully asserts that claim 25, as amended, should be allowed over the cited art. Consequently, dependent claims 26-31 should also be allowed.

Applicant believes that no additional fees are due in connection with this submission, however, if any fees are necessary, please charge Deposit Account No. 02-0390, Baker & Daniels.

If there are any questions regarding any of the foregoing, the Examiner is respectfully requested to contact the undersigned.

Respectfully submitted,

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